

JORDAN RIVER BASIN

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10172200 RED BUTTE CREEK AT FORT DOUGLAS, NEAR SALT LAKE CITY, UT
(Hydrologic bench mark station)

LOCATION.--Lat $40^{\circ}46'48''$, long $111^{\circ}48'19''$, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 1 N., R. 1 E., Salt Lake County, Hydrologic Unit 16020204, on right bank 0.4 mi upstream from dam forming Red Butte Reservoir, and 1.7 mi northeast of Fort Douglas.

DRAINAGE AREA.--7.25 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Figures of monthly discharge for January 1942 to September 1963, collected by Corps of Engineers, U.S. Army, available in files of Salt Lake City District Office, Geological Survey.

GAGE.--Water-stage recorder. Elevation of gage is 5,400 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105 ft³/s, May 28, 1983, maximum gage height, 3.81 ft, May 17, 1984; minimum, 0.17 ft³/s, Nov 20, 1992, possible ice jam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	May 11	1145	*3.2	*0.65					

Minimum daily discharge, 0.39 ft³/s, Aug. 21.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.4	1.3	1.3	1.4	1.3	1.8	2.0	1.5	0.91	0.46	0.44
2	1.4	e1.2	1.4	e1.3	1.5	1.3	1.8	2.0	1.4	0.87	0.48	0.43
3	1.2	e1.1	1.4	1.3	1.4	1.3	1.9	2.0	1.4	0.86	0.50	0.42
4	1.2	e1.1	1.4	1.3	1.4	1.3	2.0	2.4	1.3	0.85	0.50	0.42
5	1.2	0.98	1.3	1.3	e1.3	1.3	1.9	2.2	1.3	0.84	0.47	0.42
6	1.2	0.99	1.3	1.2	e1.2	1.3	1.8	2.1	1.3	0.82	0.47	0.43
7	1.2	1.1	1.3	1.3	1.2	1.3	1.8	2.2	1.2	0.82	0.46	0.44
8	1.2	1.3	1.3	e1.3	1.1	1.3	1.9	2.4	1.2	0.78	0.46	0.42
9	1.2	1.3	e1.3	e1.3	1.3	1.4	2.0	2.4	1.2	0.75	0.45	0.49
10	1.2	1.3	e1.3	1.3	1.3	1.4	2.0	2.8	1.2	0.73	0.44	0.77
11	1.2	1.3	1.3	1.2	1.3	1.6	2.0	3.1	1.1	0.70	0.42	0.58
12	1.2	1.3	1.3	1.2	1.3	1.7	2.1	3.2	1.1	0.68	0.42	0.53
13	1.2	1.4	1.3	1.2	1.4	1.8	2.1	3.1	1.1	0.67	0.42	0.51
14	1.2	1.4	1.3	1.2	1.6	1.9	2.1	2.9	1.1	0.66	0.41	0.52
15	1.2	1.4	1.3	1.2	1.5	1.9	2.3	2.8	1.0	0.64	0.40	0.54
16	1.2	1.4	1.3	1.2	1.5	2.4	2.1	2.6	1.00	0.62	0.43	0.54
17	1.3	1.4	1.4	1.3	1.4	2.1	2.0	2.5	0.99	0.62	0.43	0.61
18	1.3	1.4	1.3	1.2	1.4	2.0	2.4	2.4	0.99	0.61	0.42	0.63
19	1.3	1.4	e1.3	1.3	1.3	1.8	2.3	2.4	0.98	0.58	0.41	0.61
20	1.3	1.4	e1.4	1.3	1.3	1.8	2.4	2.3	0.98	0.56	0.40	0.59
21	1.3	1.4	1.4	1.2	1.3	1.8	2.3	2.2	1.0	0.55	0.39	0.57
22	1.3	1.4	1.3	1.2	1.4	1.9	2.3	2.2	1.00	0.52	0.48	0.56
23	1.3	1.4	e1.4	1.2	1.4	1.9	2.3	2.1	1.4	0.52	0.48	0.55
24	1.3	1.4	e1.3	1.2	1.3	1.9	2.2	2.0	1.3	0.51	0.45	0.54
25	1.3	1.4	e1.4	1.2	1.4	1.9	2.2	2.0	1.2	0.55	0.44	0.53
26	1.3	1.3	1.4	1.2	1.3	2.0	2.2	1.9	1.1	0.59	0.43	0.53
27	1.3	e1.3	1.3	1.4	1.4	1.9	2.2	1.8	1.0	0.53	0.43	0.55
28	1.3	1.4	1.3	1.6	1.3	1.8	2.2	1.8	0.99	0.51	0.43	0.54
29	1.3	1.3	1.3	1.4	---	1.8	2.1	1.6	0.97	0.50	0.45	0.55
30	1.4	1.3	1.3	1.3	---	1.8	2.0	1.6	0.95	0.48	0.47	0.54
31	1.4	---	1.4	1.4	---	1.8	---	1.5	---	0.47	0.46	---
TOTAL	39.3	39.17	41.3	39.5	37.9	52.7	62.7	70.5	34.25	20.30	13.76	15.80
MEAN	1.27	1.31	1.33	1.27	1.35	1.70	2.09	2.27	1.14	0.65	0.44	0.53
MAX	1.4	1.4	1.4	1.6	1.6	2.4	2.4	3.2	1.5	0.91	0.50	0.77
MIN	1.2	0.98	1.3	1.2	1.1	1.3	1.8	1.5	0.95	0.47	0.39	0.42
AC-FT	78	78	82	78	75	105	124	140	68	40	27	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	1.96	2.02	1.92	1.95	2.36	4.50	9.08	12.6	6.63	3.31	2.13	1.82
MAX	3.86	3.53	3.37	3.46	7.00	12.8	22.2	50.5	29.7	9.22	5.77	4.10
(WY)	(1984)	(1984)	(1984)	(1971)	(1986)	(1983)	(1986)	(1983)	(1983)	(1983)	(1983)	(1983)
MIN	0.68	0.93	0.91	0.83	1.00	1.06	1.79	1.55	0.95	0.60	0.44	0.47
(WY)	(1991)	(1991)	(1964)	(1964)	(1964)	(1964)	(1990)	(1990)	(1992)	(1990)	(1990)	(1990)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1964 - 2003
ANNUAL TOTAL	1,009.19	467.18	
ANNUAL MEAN	2.76	1.28	
HIGHEST ANNUAL MEAN			4.20
LOWEST ANNUAL MEAN			12.5
HIGHEST DAILY MEAN	10	3.2	1.12
LOWEST DAILY MEAN	0.82	0.39	May 28, 1983
ANNUAL SEVEN-DAY MINIMUM	0.84	0.41	Aug 9, 1990
ANNUAL RUNOFF (AC-FT)	2,000	927	Sep 10, 1990
10 PERCENT EXCEEDS	7.8	2.1	3,040
50 PERCENT EXCEEDS	1.5	1.3	9.6
90 PERCENT EXCEEDS	1.0	0.48	2.4
			1.1

e Estimated

